

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (previously presented): A method for determining the thickness of a layer of lacquer which is applied by electrophoretic immersion coating to an article, wherein the article for immersion coating is immersed in a lacquer immersion bath containing lacquer and forms an electrode which generates, together with at least one counter electrode, an electrical field comprising the following steps:

- a) determining the electrical charge flowing through the article during immersion coating,
- b) measuring the maximum starting current which flows through the article at the start of immersion coating and using this measured starting current to determine the surface of the article exposed to the lacquer,
- c) determining the thickness of the layer of lacquer based on the electrical charge determined in step a) and the surface determined in step b).

2. (previously presented): The method of claim 1, wherein the electric current flowing through the article during immersion coating is measured for determining the electric charge in step a).

3. (canceled):

4. (previously presented): The method of claim 1 wherein the thickness of the layer of lacquer is determined in step c) by taking into account the temperature of the lacquer.

5. (previously presented): The method of claim 1, wherein the thickness of the layer of lacquer is determined in step c) by taking into account the pH of the lacquer.

6. (previously presented): The method of claim 1, wherein the thickness of the layer of lacquer is determined in step c) by taking into account the electrical conductivity of the lacquer.

7. (previously presented): The method of claim 1, wherein the thickness of the layer of lacquer is determined in step c) by taking into account the solids content of the lacquer.

8. (previously presented): The method of claim 1, wherein the thickness of the layer of lacquer is determined in step c) by taking into account the density of the lacquer.

9. (previously presented): The method of claim 1, wherein the thickness of the layer of lacquer is determined in step c) by taking into account the spacing between the article and the at least one counter electrode.

10. (previously presented): The method of claim 1, wherein the voltage applied between the electrode and the at least one counter electrode is controlled in such a way that the starting current at the start of immersion coating at least approximately matches a predetermined value.

11. (previously presented): The method of claim 10, wherein the predetermined value depends on parameters of the lacquer.

12. (previously presented): The method of claim 1, wherein the immersion coating is finished as soon as the determined layer thickness has reached a predeterminable target value.

13. (previously presented): A system for determining the thickness of a layer of lacquer which is applied by electrophoretic immersion coating to an article, comprising:

- an immersion bath for receiving a lacquer in which the article can be immersed,
- a voltage source, of which one pole can be connected to the article and of which the other pole is connected to at least one counter electrode reaching into the immersion bath,
- a charge measurement apparatus for determining the electrical charge flowing through the article during immersion coating, and,

- a computer which determines the thickness of the layer of lacquer from the charge measured by the charge measurement apparatus and the surface of the article exposed to the lacquer, wherein the maximum starting current which flows through the article at the start of immersion coating can be stored in the computer and utilized to determine the surface of the article exposed to the lacquer.

14. (previously presented): The system of claim 13, wherein the charge measurement apparatus comprises an ammeter.

15. (canceled):

16. (canceled):

17. (previously presented): The system of claim 13, comprising a temperature sensor, which is connected to the computer, for determining the temperature of the lacquer.

18. (previously presented): The system of claim 13, comprising a pH sensor, which is connected to the computer, for measuring the pH factor of the lacquer.

19. (previously presented) The system of claim 13, comprising a conductivity sensor, which is connected to the computer, for measuring the conductivity of the lacquer.

20. (previously presented): The system of claim 13, comprising a sensor, connected to the computer, for determining the solids content of the lacquer.

21. (previously presented): The system of claim 13, comprising a density sensor, which is connected to the computer, for measuring the density of the lacquer.

22. (previously presented): The system of claim 13, comprising a control device which is configured to control the voltage applied between the electrode and the at least one counter electrode in such a way that the starting current at the start of immersion coating has a predetermined value.

23. (previously presented): The system of claim 13, comprising a controller which is configured to terminate the immersion coating as soon as the specific lacquer thickness has reached a predeterminable target value.